

Abstract of the Disclosure

To provide a compact, light and simple linear or rotary motor driven by direct-current electric power at a low manufacturing cost for use of house fittings, carrying devices, electronic devices, and home electric appliances, a linear magnetic pole row (2) or an annular magnetic pole row (4) in which N and S poles are alternately arranged is structured with permanent magnets as a movable side electromagnetic member, two sets of coreless-type rectangular wave wires are provided as a fixed side electromagnetic member, every time when the magnetic pole row moves by one half pitch, the electricity application is switched from one of the two sets of wave wires to the other.